

THE NEW YORK ARCHITECT

VOL. V.

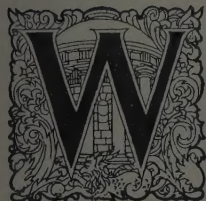
MAY 1911

No. 50

JOHN MERVEN CARRÈRE

JOHN MERVEN CARRÈRE was born in Rio de Janeiro, Brazil, in 1858, of American parentage, the descendants of French ancestry who came to the United States during the French Revolution and settled in Baltimore. His early school days were spent in the public schools of Lausanne, Switzerland and at the Institute of Breidenstein, Grenchen. His first art education was at the Ecole des Beaux-Arts, Paris, (1877-1883) under Professor Victor Ruprich Robert and Leon Ginain. In 1885 Mr. Carrere on his return to America formed a partnership with Mr. Thomas Hastings. This partnership continued until the time of Mr. Carrere's death on March 1st of this year.

The following articles contributed by Mr. Thomas Hastings, Mr. Irving K. Pond and others are herewith presented as a tribute to those high qualities of mind and heart that made John Merven Carrere a leader among men.



WHILE quietly working in the Atelier some thirty years ago—the Atelier Andri—word came to me that a compatriot, John M. Carrère, wanted to see me at the entrance of the Salle Melpomene in the Ecole des Beaux-Arts. It was at this meeting that I first met the man who was destined to be my partner for twenty-five years. I had seen him quite frequently but had always taken him to be a Frenchman. He both looked and spoke like a Frenchman. After briefly explaining to me his nationality he further explained that he was much interested in a competition for a model tenement scheme for New York City, and that the words water-table was quite frequently referred to in the program. He never had seen the word before and he said that he had called to see me to ask me to explain. In later years he frequently reminded me of the fact that I had told him that I thought it was a part of the bed mold of a cornice! Soon after this he returned to America and it was not until about two years later, soon after my return, and upon entering the office of McKim, Mead & White, that I quite unexpectedly found Carrère working as one of the draughtsmen. We were given work together on a house in Baltimore, Carrère to superintend the house, making frequent

visits to Baltimore, while I was to make the working drawings in the office. At about this time I found Carrère was also interested in the installation of a panorama canvas, a work which required a great deal of ingenuity. He being the only man equipped to undertake this peculiar kind of work and so possessing the monopoly, he used to frequently absent himself from the office so as to install one of these canvasses which was quite a remunerative undertaking. Though very young and inexperienced I at the time was much impressed with his executive and practical ability and it was at this time in the year 1885 that we resolved to enter into a partnership agreement. There was no written agreement until the year 1900, but we did agree that in case any work were to come our way we would share alike in the profits under the firm name of Carrère & Hastings, he being two or three years my senior. We sent out the usual engraved announcements and waited for months, continuing our relation with McKim, Mead & White until one day I was sent for by Mr. Flagler, who told me that he contemplated building a large hotel in St. Augustine. He wanted us to make "a picture" for it which two native St. Augustine builders, whose services he had already engaged, would use in the construction of this enterprise. No one seemed to realize the seriousness of our relation to the building of the

THE NEW YORK ARCHITECT



DETAIL IN COURTYARD, HOTEL PONCE DE LEON, ST. AUGUSTINE, FLA.

CARRÈRE & HASTINGS, ARCHITECTS

hotel until the work was actually undertaken. Soon after the beginning, however, and after a visit which I made with Mr. Flagler to the site of the proposed building, we were asked to enter into an agreement with our client that we would devote our entire time to this hotel, which was to be called the Ponce de Leon, and that we would undertake no other work until its completion. We accepted Mr. Flagler's proposition and for three years with youthful and impetuous enthusiasm, we devoted our entire time to this work, almost all of my time being spent in our office under the roof of an old colonial house which stood as a part of the present site of the Custom House in Bowling Green. During this time Carrère made over one hundred trips to St. Augustine. I shall never forget the hilarious rejoicing which took place after my return from my first interview with Mr. Flagler. Before telling Carrère what had happened I believe I upset the entire office and raised

the salary of the office boy, the one and only employee. It was all this work in St. Augustine—the hotel Ponce de Leon, the Alcazar, two churches, Mr. Flagler's house and a railroad station, which brought us closely together, working with great sympathy, each gradually finding his own sphere. The necessarily strenuous character of our work in these early days brought about because of our having so little help and because of our lack of experience made it necessary for each of us to find or drift into that portion of our work for which he seemed best fitted, and this without any prearranged understanding. Responsibility thrust upon us in this way forcing us sometimes into the solution of new problems, gave us unusual opportunities for quick development. This was the beginning of our very happy association. These first three years finished, work seemed to continually follow, so that a good and interesting practice was practically assured. In the organizing of our office, Carrère showed un-

usual ability and we always worked hand in hand with each other, each showing the greatest interest in the other's work, helping whenever there was an opportunity.

It was this impulsive nature which seemed to quicken his sensibilities and enliven his enthusiasm. In a controversy he would never resort to the use of wit or the telling of a story as a subterfuge for keeping his opponent pliable and in good humor. Partly because of this he would frequently be misunderstood by our clients. While many others respected him for his seriousness and absolute fearlessness in speaking the truth under all conditions and at all times, he was always fair and just. He would never favor a client to the loss or detriment

of a contractor and the reciprocal was equally true. He would never show favoritism, even to his nearest friend, if it was unjust to another. He would scarcely take a new work from a client if the man had even had a thought of some other architect. He was generous to a fault and needed to be constantly protected in his own interest, to keep him from being extravagantly generous and to keep people from imposing upon him. I can not help feeling that the entire profession shares my loss—the loss of a friend more even than the loss of a fellow architect, and that I feel the loss of my companion more even than the loss of my partner.

THOMAS HASTINGS.



ENSHRINED in the hearts of his fellows lives John Carrère. The image, composite yet clear, defies narrow characterization. Were it, even, simply to present a pleasing and char-

acteristic portrait of John Carrère, it would be difficult to choose the standpoint from which best to sketch in the outline. The world admires the man of force and action. It respects the successful man. It loves the gentle man; and all of these attributes or qualities were of the man, Carrère. A deep-seeing delineator of character would never make the mistake of posing a figure like Carrère's; the presentment would not generally convince, while those who know John Carrère would recognize in the "pose" but a superficial conception of the artist's. Whatever the character in which he appeared—strong and forceful as a citizen, brilliant and successful as an architect, or sympathetic and helpful as a friend—John Carrère was sincere; he did not pose.

How shall an appreciation of this rare nature—a nature frank and simple in spite of its many-sidedness—find suitable expression? The lips would utter heroic words, the breath would sound the trumpet of fame, the hand would bestow the crown of laurel upon the architect and citizen; but the heart would pour out a libation of tears at

the shrine of the generous friend, the unselfish counselor, the sane and wholesome spirit which has gone out from among us.

The praise of Carrère's achievement in the field of architecture will long be sounded; his suggestive and effective effort along the developing lines of municipal improvement will not soon be forgotten; his influence in the field of professional education will rest as a benediction on the younger men and by them be bestowed on others still to come; but achievement and effort and influence are of moment to us now only as they proclaim the greatness of a soul, a personality greater than the mediums by which and through which it manifested itself. John Carrère was human. Therein possibly lay his great strength. He possessed temperament, that necessary attribute of genius; but it served him and did not lead to his undoing, as with many a weaker man. He had success, and success, which has hardened many another, added but softness to his nature. He had friends, but he did not use them as stepping stones to his own ends; rather as objects upon which he might expend his sympathy and devotion. John Carrère was human and the human in him might have overpowered him as it has many another, but he rose superior to it. Many who were thrown into intimate contact with him during these latter years reaped inspiration and encouragement in contemplating his development. Temperamental and impulsive by nature, quick

THE NEW YORK ARCHITECT

to perceive, quick to conceive and as quick to act, fearless and sometimes blunt in his emphasis of the right as he saw it, it is not to be wondered that in instances his merely human quality asserted its prerogative; but it stamps John Carrère as a great man that he was willing and able, frankly and with finality, to brush the temporary mist from his clear mental vision.

Underlying all his strength was an extreme sensibility, and a keen sensitiveness

force and indifference which underlies greatness, as this life demonstrates.

I am impelled to pay this passing tribute to the memory of John Carrère not only because he had taken me into his confidence and had honored me with his friendship, but, also, because our mutual and intimate official relation to the American Institute of Architects, that altruistic body of professional men to which he gave unsparingly of his time, of his strength, of his wisdom, of his



COURTYARD, HOTEL PONCE DE LEON, ST. AUGUSTINE, FLA.

CARRÈRE & HASTINGS, ARCHITECTS

to criticism. Criticism of his art, it may be said without discussing his theory of art, he accepted for what it was worth, as an individual expression of judgment on a matter of taste; but to question Carrère's motive or to criticise the inherent right or justice of his act, cut him to the quick, while if he came to realize that his act was capable of misinterpretation he could not dismiss the matter from his mind until the surrounding atmosphere was cleared. It is not always brute

devotion, places me in a position to realize most keenly what John Carrère's loss means to the profession and especially to that body for which and with which he labored so unselfishly toward the elevation of the highest standards in architecture.

The Institute misses Carrère, the municipality misses him, his friends miss him, his fireside misses him—a void exists, never quite to be filled.

IRVING K. POND.



THE dignity of a profession is determined by the character of the men who appear as its representatives before the public. The genius and technical skill of its members may be admired, their ability in the management of affairs recognized; but in the end this admiration and recognition counts for little in the maintenance of the distinction of a professional body unless its leaders are trusted as men.

Just such a trustworthy and trusted representative the architects of this country, and especially of this city, have had in John M. Carrère: a man who added dignity to our profession by the mere strength and clarity of his character which became evident to all who came in contact with him.

If his tragic death has brought to his professional brethren for the first time a full realization of the weight they have given to his counsel, it has brought to the public at large also an appreciation of his service to them. Intensely interested, and properly ambitious, as he naturally was in the successful practice of his profession, he never for a moment lost sight of the fact that he was a member of a community of vast potentialities, and a citizen of a great republic in whose advance in every direction he took the most ardent interest. The predominance of his artistic impulses did not blind him to the non-artistic interest of his compatriots; and as we look back upon his career we find him ever ready to give of his strength to the betterment of social and governmental conditions where he felt his own effort would tell. The importance of his service to his profession can scarcely be overestimated; but for all that it may truly be said that his greatest service was rendered to the public at large, in the awakening of its dormant æsthetic impulses, and in the enforcement upon those in power of the importance of encouraging all efforts of the people towards the realization of their æsthetic ideals. Those who were closest to him know well the energy he devoted to all schemes for the artistic development of our cities; with what *abandon* he threw himself into the movement for the establishment of the Art Commission of the City of New

York, which has had so large an influence throughout the country, and the hearty support he gave to the members of the Commission after it was formed; with what urgency he pressed upon the National Government the consideration of the artistic interests of the people.

It is difficult to consider his work as an individual architect. From the very beginning of his career he became a part of a dual personality, as it were, by his associations with Mr. Thomas Hastings: and yet his personality was felt in all the work that was done by the firm, and in its important structures he has his enduring monument.

When we turn to the thought of his relations with his professional brethren we find ourselves concerned with qualities of leadership which again point to the important influence of character. His courage was undaunted: yet there was always coupled with it a due consideration for the weaker ones among his fellows, a wonderful tactfulness in dealing with those whose views differed from his own, and a constant endeavor to reach ends common to all by the suppression of differences and the combination of effort upon essentials. And if the modes of action suggested by him so often prevailed it was because we trusted him; because we felt that he hid from us no covert self-interest, but laid before us his soul as an open book. I have known no man of so constructive a nature who was so eager to listen to opposing opinion, or so ready to change his views when he became convinced that the opposition was justified.

But, after all, the recognition of these values to community and profession that have been lost in his cruel sacrifice fail to tell of the weight of the blow that has fallen upon those who were privileged to know him intimately. His capacity for friendship was unbounded; his goodness of heart seemed to bring into evidence as by a sympathetic vibration the finer qualities of those he cared for. It is difficult to realize that that hearty joyous man is no longer to be met in our daily lives to counsel, encourage, and rejoice our souls. We have all lost a leader; but beyond that a host of us have lost a trusted and beloved friend.

HENRY RUTGERS MARSHALL.



OTHERS have written of Mr. Carrère's professional and public activities, but, illustrious as these were, to those who knew him well they were but one expression of the eager and forceful personality which also sought constantly to express itself in the ways of friendship and of personal helpfulness. His generous impulses were always looking for an outlet. We who miss daily his companionship, remember how full of eagerness he rushed into whatever was going on, confident that what most interested him, interested others, as indeed it was pretty sure to do when he shared with them his overmastering enthusiasm. And yet, though he hated interruptions, with what patience he listened to anyone he thought he ever could help, and with what unfailing readiness he reached out his friendly hand!

Especially was he interested in the young

men around him, and among their problems, especially in that of carrying on their professional education. To ambitious draughtsmen with eyes fixed on the Paris School, he somehow opened a way to get there, and the many fellows who came back straight from the school into his offices, found him ready to help from his wealth of experience and practical sense. Nothing in him helped them more than his devotion to the honor of his profession, his unflagging efforts to advance its standing, and the straightforward way in which, as a good citizen, he held his talents at the service of the common good.

How hard it is to realize that he will never burst in upon us again, with his cheering smile, his cordial grasp of the hand and enthusiastic words. Carrère was always ready, ready to give his best energies to the big problems that were his to solve, and ready, too, in everyday living with

"Those little nameless unremembered acts
Of kindness and of love."

C. H. ALDRICH.



CARVED PANEL, NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS



IT IS so difficult for me to make those who read this appreciate and understand just what John Mervin Carrère meant to me, that were I consulting my own personal feeling, I should refrain from any public expression of my grief in his loss or any analysis at this time of the unusual character of this man who stood so close to me for many years and to whom I was accustomed to look as mentor and guide.

I should regret, however, to find my name omitted from among those whose tributes fill these pages. Therefore, in writing these lines I am actuated by a sense of duty towards the memory of one who from the very first moment of our acquaintance until that night he went from my house to his untimely death, was to me all a friend could be, with that added something which I so highly prized, and which I find so impossible to adequately express.

In the earlier days when as a young man I had completed such preparatory study as I hoped would fit me to assume the duties of the future, and surveyed, with the assurance that is the attribute of youth, the various fields open to me, a fortunate chance led me to the office of Carrère & Hastings. At that time they were two young men starting on careers that have since proved so illustrious. It was in their office that I learned the rudiments of my profession and it was due to their kindly encouragement that I was enabled to apply myself. It was at their suggestion that I finally went to Paris to work at the Ecole des Beaux-Arts. Almost from the first there seemed to exist on Mr. Carrère's part a paternal interest in my professional advancement. In those formative days when as a student I stood so much in need of a guiding hand and an encouraging word, I found Mr. Carrère always ready with helpful sympathy and kindly advice that kept me in the right direction and smoothed the obstacles in my path.

Life was very dear to Mr. Carrère—hallowed for its own sake and for the opportunities it gave him to serve others. Art with him was an irresistible impulse and his profession was his religion.

One must instinctively feel in contemplat-

ing the useful life and inspiring work of Mr. Carrère, a suspension of the critical faculty and be lost in a maze of real appreciation. His influence for good and his extraordinary activities were not finished; it is difficult to comprehend a Providence that terminates so useful a life in so untimely a manner; surely a man who had accomplished so much had logically much more to do.

I know that he felt this keenly, for on the night that he was fatally injured, he talked and planned of what he wished and hoped to accomplish in the future.

There were combined in Mr. Carrère's personality many talents widely diverse and rarely united in one individual. He was possessed of a high order of intelligence, a well organized mentality and a sterling integrity which made him a good executive. He was at the same time childlike in his capacity for enthusiasm. He was saturated with a spirit of devotion and sincerity to his art which made him very human and enabled him to take a keen and friendly interest in the work of those whose turn it was to be young in the profession. His directness and frankness, together with his ready ability to express his thoughts in the fewest words, gave him infinite capacity for work of all kinds. His impulsiveness was often misunderstood and misjudged. But perhaps his most characteristic trait was a firm determination to overcome every difficulty lying in his path and a dogged tenacity to stand against every adversity. He was ever serving others while he disappointed himself. His fine human sympathies impressed the seal of truth and loyalty on everything that he touched, and created an instinctive longing on his part to accomplish and give something in some form of artistic expression which would add to the total of actual beauty in the world.

In later years he plunged into the field of civic reconstruction and improvement and succeeded in making his influence felt and his opinions sought. It was a matter of concern to Mr. Carrère that architectural criticism and appreciation, if any, had become careless and indifferent, but he was always hopeful and confident that in time our national art would grow and improve naturally and acceptably out of the real necessities of an

THE NEW YORK ARCHITECT

earnest progressive people expressing finally in art the great motives in their lives.

Carrère was, in my opinion, an artist who can hardly be placed too high. In his passing the profession and the country at large has suffered a loss that brings with it a sense of the irreparable.

It is not for me to discuss the place that Mr. Carrère will hold among the illustrious architects of the twentieth century. I know that it is dangerous to pass judgment concerning what we believe to be the great men of the present, for such judgment must invariably be made with a knowledge that it

may be modified when things are finally seen through the perspective of the ages. But I hazard the opinion that John Mervin Carrère will stand in the forefront, among the leading formative architects of this century. What he did for art were deeds of worship. Art for him was a necessity, not a luxury. His powerful influence for good in American architecture will live long as an example and helpful guide to his brother architects who are continuing the work, and a source of real pride to those who knew and loved him.

DONN BARBER.



CHURCH AT ST. AUGUSTINE, FLA.

CARRÈRE & HASTINGS, ARCHITECTS

THE NEW YORK PUBLIC LIBRARY

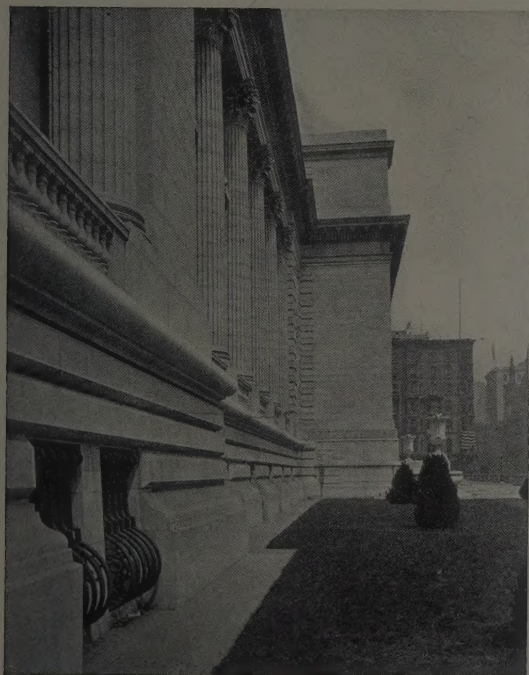
CARRÈRE & HASTINGS, ARCHITECTS



THE site of the magnificent library building, which by the time this is read will have been formally opened to the public, was previously occupied by a distributing reservoir, whose gloomy but picturesque ivy-covered walls remained standing long after the reservoir had outgrown its usefulness as a conservator and distributor of water to the lower Manhattan district.

The New Yorker born during the late '60's will remember the structure as one of the city's landmarks. At the time when the reservoir was serving the purpose of its construction, the general aspect of the city varied greatly from what it presents at this time. The tall building was not known, business was confined to the section south

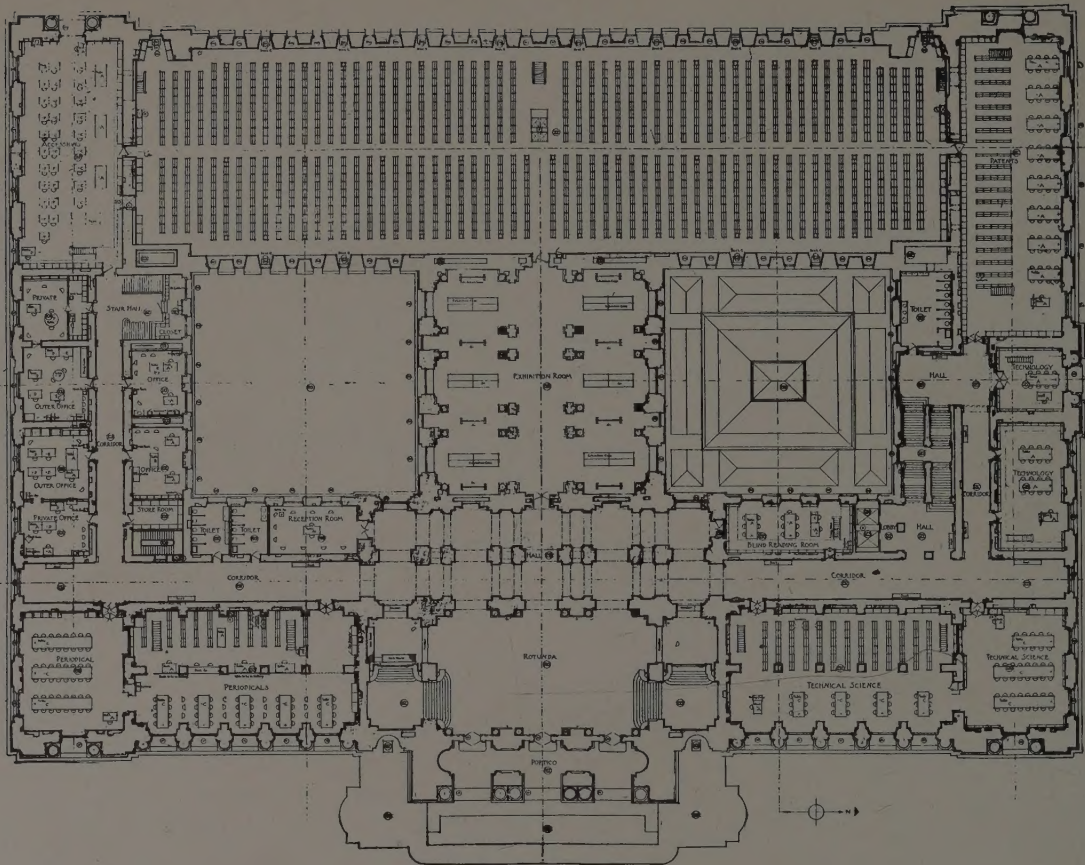
of Canal Street, and along the avenues north of that street and the intersecting streets, were residences. Fifth Avenue was a street of stately homes and the walk of fashion. The reservoir marked the northern boundary of the fashionable district, and it was at this point that the promenade turned and retraced his steps. The libraries that were scattered at different points within this residence section, and which formed the nucleus of the present dignified building, had all been endowed long before the reservoir had ceased to be used. In 1849 John Jacob Astor, in 1870 James Lenox, and in 1887 Samuel J. Tilden, each endowed a separate library for the free use of the people of New York. Meantime there had been in existence so-called "circulating libraries," where one might pay an annual subscription and become entitled to the use of the read-



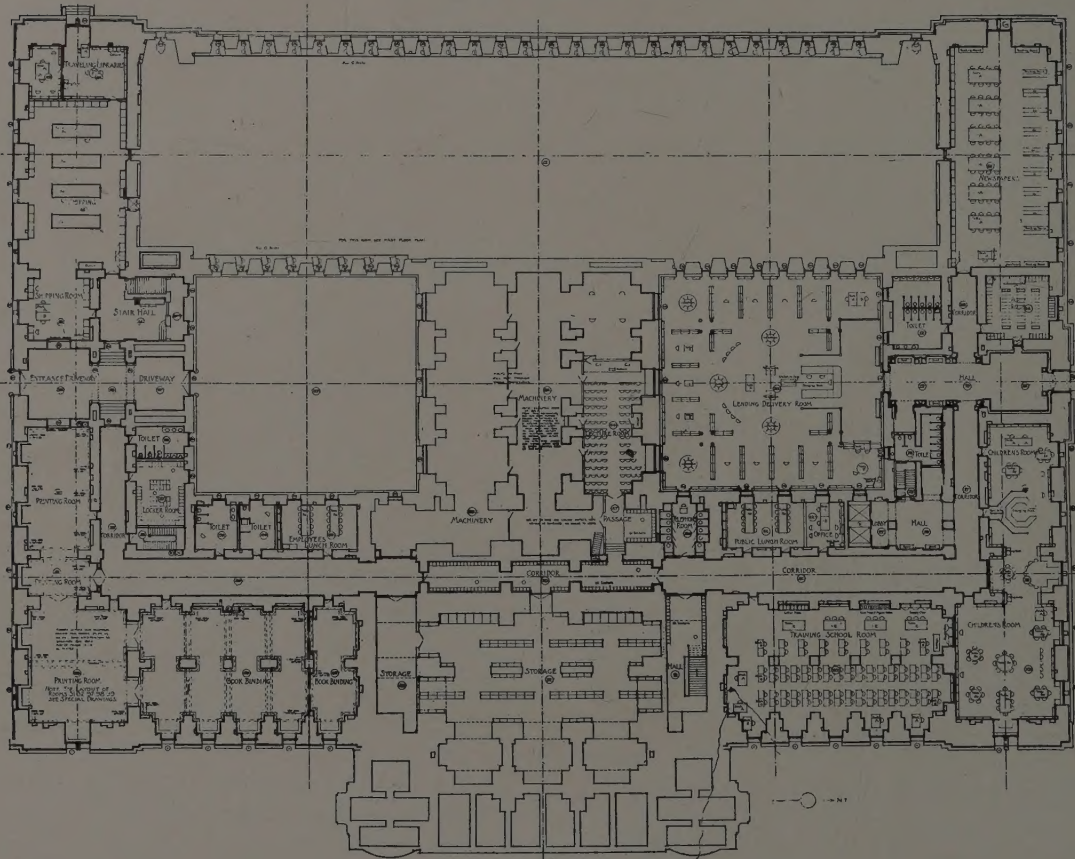
LOOKING NORTH ALONG FIFTH AVENUE
FRONT



THE BRYANT MEMORIAL ON THE WEST
TERRACE

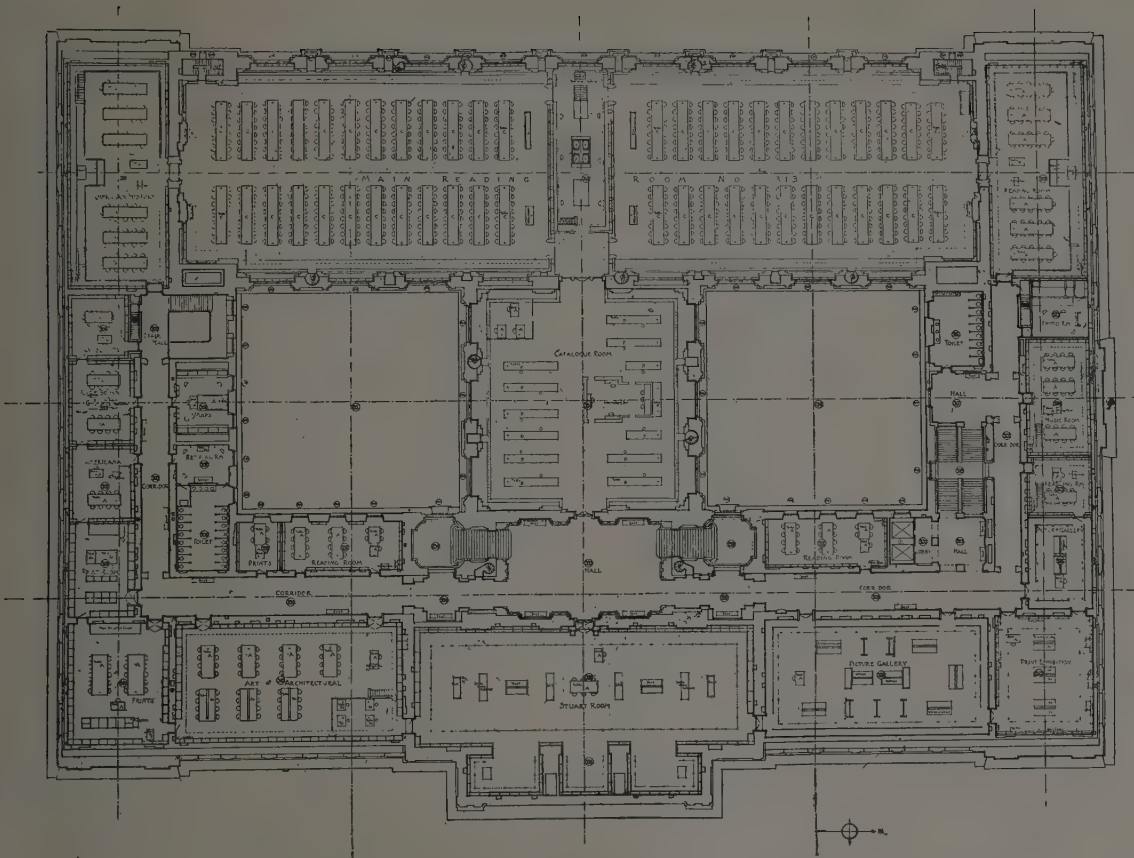


FIRST FLOOR PLAN

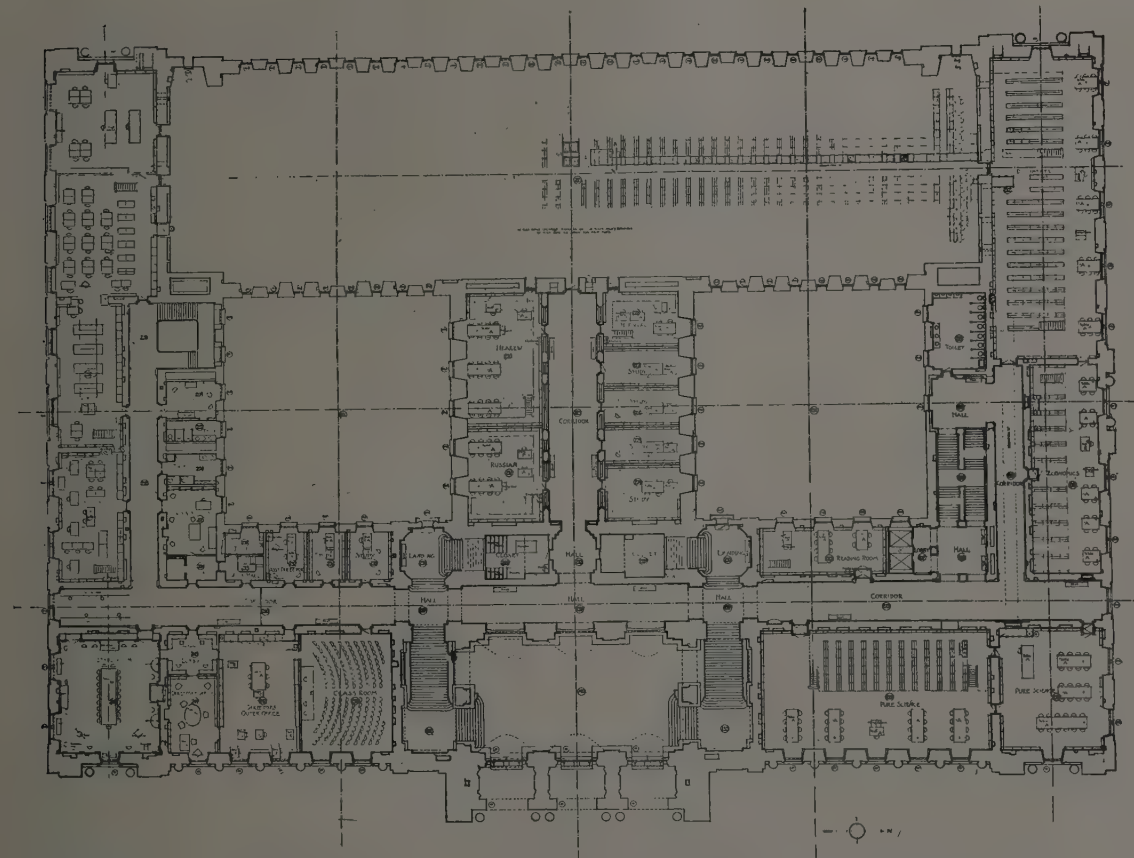


BASEMENT PLAN

THE NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS



THIRD FLOOR PLAN



SECOND FLOOR PLAN

THE NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS



DETAIL ON NORTH SIDE OF MAIN
ENTRANCE ON FIFTH AVENUE

ing-rooms and permitted to take books home for certain lengths of time.

It was not, however, until the various endowments above referred to had been generously made that the public had free access to the books and periodicals that were current, or such works of reference as are necessary to the student.

In 1895 the three foundations—the Astor Library, the Lenox Library, and the Tilden Trust—were merged to form The New York Public Library. The trustees of these three libraries not only control these principal collections, but also the many branches of what was formerly the New York Free Circulating Library, and the branch libraries established under the terms of the gift of Mr. Andrew Carnegie, made in 1901.

In 1897, the site having been secured and preliminaries arranged, it was decided to select architects by competition. Six designs were chosen from those submitted in an open competition. A second competition was held between the authors of these six designs and six other architectural firms nominated by the trustees.

The final result was the selection of Messrs. Carrère & Hastings as the architects of the building.

As will be noted by the illustrations in this issue, the style is modern Renaissance, generally inspired from the Louis XVI. period, with such modifications as the conditions and needs of the present age suggest.

The main front of the library extends along the west side of Fifth Avenue, from Fortieth to Forty-second Streets, while the tall windows of the great stack room at the rear look out on the open space of Bryant Park and Sixth Avenue, to the west. Nothing better could be desired as a location for a library building. It affords needed space for so monumental a structure, and it is easily accessible from the terminals of two great railways, while all the city transportation lines pass near by.

The length of the library north and south is 390 feet, with a boiler and engine room in the basement extending 51 feet, on the Fortieth Street side, between side wall and building proper. The depth east and west is 270 feet, and the total cubic contents of



DETAIL OF MAIN ENTRANCE



MANTEL IN DIRECTORS' ROOM

the building is approximately 10,380,000 feet.

Below ground, the foundation of the building, which rests on the floor of the old reservoir, is built largely from stone selected from the walls of the reservoir. Above ground, the foundation walls are of brick, laid up in cement mortar and faced everywhere, including the interior courts and entrance hall, with white marble, quarried at Dorset Valley and at Danby, Vt. This marble facing is not a thin ashlar, but a structural part of the wall, and averages 12 inches in thickness.

The floors are of steel beams, with terracotta arches; the roof of copper and glass. It is interesting to note that there is no vertical steel in the building.

The whole building is so nearly fireproof that no special vaults or chambers have been considered necessary for the keeping of valuable books and manuscripts. It is to be regretted that the daily papers should give space to irresponsible correspondents who have endeavored to cast a suspicion on the thoroughly fireproof character of the building, or to the thoroughness in which the

electric wiring and heating pipes have been designed and installed.

The technical reader needs no assurance that every precaution known to modern practice has been exercised in these matters, and will, of course, pay no heed to the thoroughly unreliable criticism of space writers and self-appointed critics. Yet, it is to be deplored that a daily press, to which the people naturally look for reliable information, should be so thoroughly misled as they have been in this instance.

In form the building is a combination of a square and T in plan, forming a rectangle, with two interior courts. There are four floors, besides the cellar. The sides and front of the building are comparatively low, forming the square, the top floors being lighted by skylights. The centre and rear parts, forming the "T" and containing the main reading and catalogue rooms, rises much higher and are lighted by windows. The main book-stack is directly under the main reading room, and occupies the greater part of the rear.

The Department of Administration is on the Fortieth Street side, while the smaller reading rooms occupy most of the Forty-second Street and Fifth Avenue sides. From the main entrance, the two main stairways lead directly to the main reading room on the third floor.

This main reading room is probably the largest in any public library. It has a seating capacity for about 800 people, almost double the space set apart for the public in the famous circular reading room in the British Museum, built half a century ago.

In the scheme of the interior decoration of The New York Public Library, Messrs. Carrère & Hastings have very thoroughly demonstrated that the more imaginative problems of interior decorations are as thoroughly in their grasp as are the technical ones of planning and construction. The result, to quote a writer who described in detail these features, "will be a valuable lesson in decorative art to the hundreds of thousands of people who annually pass through the splendidly equipped apartments of this new library building."

This account would be incomplete without brief reference to the rare possessions that will find lodgment in the building. The

THE NEW YORK ARCHITECT

Lenox Library, celebrated for its collection of rare Americana, contains examples of every book obtainable printed prior to 1700, bearing on the New World. To these have been added George Bancroft's famous historical library and the Emmett papers relating to the Revolution. The files of newspapers form in themselves a rare collection, and begin with the year 1710. While the earlier years are in some places fragmentary, yet there are no less than 1,000 volumes of papers published prior to 1800.

Besides these precious possessions, which deal with the history of America, The New York Public Library contains many rare books and folios and many special collections, among which are some 3,000 volumes of Shakesperiana; upwards of 10,000 volumes of music, 8,000 volumes of Bible collections, and a wonderful geographical collection of 21,000 volumes, with many thousands maps from earliest times to the end of the Seventeenth Century.



COURTYARD, HOTEL PONCE DE LEON



DETAIL OF MAIN ENTRANCE ON FIFTH AVENUE

NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS



NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS

THE ILLUMINATION OF LIBRARIES

By MELVIN SPENCER



THIS is an age of specialization. Details which the architect of former days looked after himself, are now handled by men who have been trained to specialize in one particular subject, and who have thoroughly mastered its problems. The development in the art of artificial illumination has produced within the last few years the lighting specialist, who now plays an important part in planning the details for the illumination of the majority of our finest buildings.

Perhaps no one class of buildings depends for its efficiency so much on its lighting equipment as the public library, for the main function of a library involves the continued use of the eyes under natural and artificial light. Too little attention has been paid in the past to this important subject, and a little investigation of the needs and requirements of library lighting will amply repay study. The chronic defective vision of the student is proof positive of the need for improvement in the tools he is compelled to use. The close student has need of his entire nervous energy to perform the functions of his brain, and should be relieved of any physical effort in the pursuit of his studies.

The eye is a most delicate organ, and the medical profession tells us that a large portion of the diseases of the eye have developed since the introduction of electric lamps, and that the majority of cases of defective sight can be traced to our commercial light sources. Any use of the eyes which calls for close application, such as reading, involves the use of that part of the eye known as the "fovea." This consists of a number of cones, by means of which we distinguish form and color. Night vision is possible through the use of rods which contain a chemical solution known as visual purple, which is automatically renewed under proper illumination, but which is drained under poor lighting, causing eye fatigue and strain. A retina, properly protected from a light source, is able to distinguish details, which would be

simply a blur under any other conditions, simply because the protection of the retina allows the visual purple to be conserved. As this process is largely chemical, defective vision has often been blamed on the purely chemical rays of light, viz.: the ultra-violet; but recent investigation has proven that the majority of eye diseases are caused by the strain on the eye muscles by ill-advised interior illumination, both natural and artificial. In reading, the muscles of the eye focus the fovea on the page, and any light in the line of vision acts as a magnet to draw those muscles from their task of focusing on the reading page, causing the strain, which is the source of all eye troubles. Ordinary practice has proven the fact that one instinctively reads with one's back to the light. This is done simply to protect the eyes from the source of light, yet in libraries we find this cardinal principle time and again violated; and yet, this simple fact will assume importance when we consider the question of general and local illumination.

In considering the planning of proper light sources for a library it is well to consider the opinion of the library authorities and the suggestions of the illuminating experts. Recently there was held in London a joint meeting of the leading librarians of the city and the lighting authorities to discuss the needs and possibilities of library illumination. Results of much interest to every architect were tabulated at this meeting. It was the opinion of those present that the same intensity or arrangement of light was not suitable for all libraries—the needs of reference libraries being quite different from reading libraries and that the illumination in different departments of general libraries should depend on the needs of each department. There was considerable difference of opinion in reference to the relative merits of general and local illumination and comment was made on the almost universal difficulty of securing satisfactory results in the lighting of book shelves, tables and gangways. The necessity of avoiding glare of any sort was fully discussed and much valuable data as to the proper intensity for various needs

of the library was gathered. An illumination of two to six candles is needed on the reading tables according to the class of work involved while on the book stacks an intensity of one and a half to two foot candles is adequate.

This is of considerable interest to all architects as modern methods of testing lighting intensity makes it possible to specify a given intensity and distribution of illumination with as much accuracy as heat, with the assurance that results can be accurately tested after installation to assure the architect that his requirements have been carried out. Portable photo-meters are now available, which give direct reading of light intensity in foot candles, making the testing of any installation a comparatively simple matter.

The question of library lighting divides itself quite naturally into a broad division of general and local lighting. Opinions vary considerably as to the comparative value and utility of the two in reference to library lighting, but the general consensus of opinion seems to be that a soft, cheerful illumination is needed, with the use of properly designed local lights. In reading libraries the general illumination should be featured, and a cheerful, inviting tone is needed, both for the sake of attracting people and keeping them when once attracted.

This can be greatly aided by the use of light and color schemes in the decoration of ceiling and upper portion of walls.

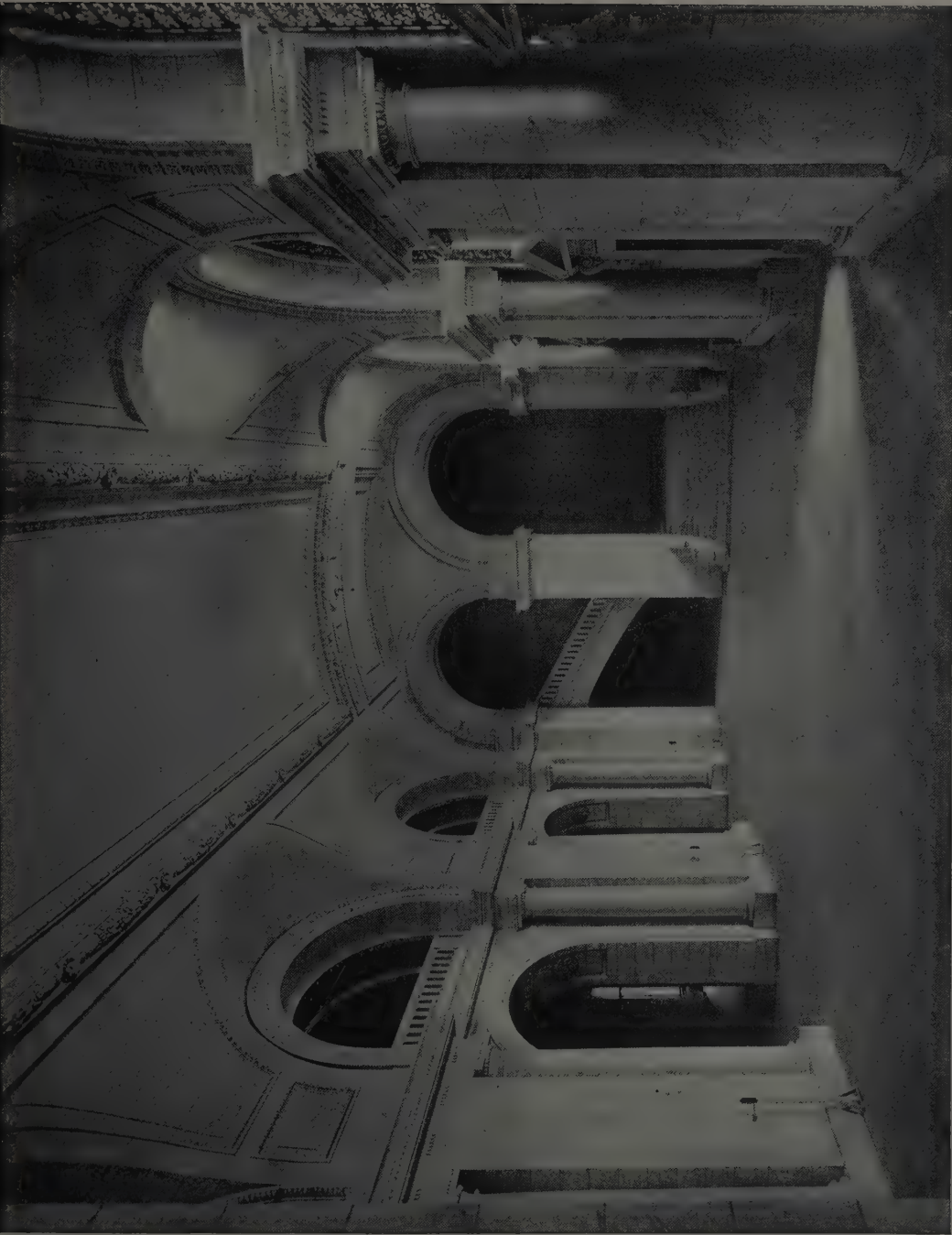
In reference libraries, where close work is required, the general illumination should be subdued and local lighting depended upon for detail work. Particular care should be taken to keep all exposed lights out of the line of vision of those reading at the tables, and the reason for this will become apparent when the question of local illumination is discussed.

The daylight illumination of libraries is a subject in which better results have been prevalent, but in many well-planned buildings the illumination has been spoiled by the placing of furniture and stacks in such a position as to cut off direct light from reading tables, where it is most needed. In planning libraries, architects should keep in mind that the reading tables form a most important part of their building, and all details should be built up around these tables. If

possible, windows should be placed as high as possible and skylights should cover as large an area as convenient.

The typical problems of library illumination are those involving local illumination, and these can be roughly divided into stack lighting, rack lighting, the lighting of reading tables, gangway lighting and gallery lighting. The lighting of stacks presents one of the most difficult problems that librarians meet, and is the one branch of library lighting where a poor installation is almost invariably found. Various methods have been tried, with varying results. A brilliant light source is sometimes placed immediately in front of stacks. This method has the obvious disadvantage of placing a brilliant light in the field of vision presenting such an annoying glare that it is often impossible to read the titles of books below the top shelf. An interesting experiment was tried on the continent in reference to stack lighting, where the stacks were lighted from above, as suggested, and also by means of reflectors concealed in the floor. This arrangement, however, is liable to produce back glare, and is obviously very expensive in installation and upkeep.

For the proper illumination of stacks it is essential that the light be equipped with some sort of a reflector so constructed as to throw an even diffusion with a perpendicular distribution over the entire area of shelf space, and yet be totally screened from the eyes of one searching for a particular book. The ideal illumination for stacks would be by means of a continuous reflector installed along the top of the stack running its entire length, but as this often involves a large expense, small units can be used to advantage. Where possible it is advisable to design the stacks so that an overhanging balcony runs coincident with the stacks, as this gives opportunity to properly conceal the lights and also enables the reflectors to be placed far enough away from the stacks to ensure even diffusion. Two light bronze reflectors lined with silver corrugated glass, concealed beneath such a balcony were adopted after exhaustive tests in the building of the New York Public Library, and the results ascertained by practice and photometric tests have proven most satisfactory. Where this method is impractical it is



NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS

necessary that reflectors be placed beyond and above the tops of the stacks, very much as pictures are lighted. The proper distance and spacing of these units would depend upon dimensions of stacks, and light placed too close would produce a disagreeable glare on one or the other of the shelves. Continuous reflectors of this type are planned for use in the New State Educational Building in Albany, N. Y., where over 20,000 feet of reflectors of this type will be used. This serves as a good example of the attention which is now being paid to proper lighting facilities in the best of our libraries.

Even more important to the Architect than stack lighting is the proper illumination of the reading tables. Too much attention cannot be paid to this detail, and it is this portion of the lighting which will be most extensively used, and where a poor installation would do the most harm. It has already been pointed out that the proper illumination on the reading surface should vary from 2 to 5 feet candles, the exact intensity to be determined by the nature of work to be done at each particular detail. For work, such as examining detail drawings, as high an intensity as 4 or 5 feet candles would be necessary, while for casual observance of large photographs, or the reading of large type would require but 2 or 3 feet candles.

Before taking up the means of producing these results, it might be well to consider for a moment the effect of side illumination. It has been found by means of experiments that a person who is able to read type of a given size under local lighting where the source is well shaded from the eyes, is unable to distinguish the same type if a bright source of light is placed or temporarily placed at one side. It is found that the visual acuity is inversely proportional to the angle made by the source of side illumination, and the plane of the reading table, and that any light source within an angle of 26 degrees tends to decrease the visual acuity to a marked extent. Everyone has experienced annoyance due to seeing a light source out of the corner of one's eye when reading, which only proves the truth of our conclusion. A familiar proof of this fact has probably been experienced by all motorists driving at night. Ap-

proaching an arc lamp one is able to distinguish details in the road very plainly due to the brilliant illumination of the head lights, but after passing through the intense light due to an outside arc, it is impossible to distinguish a single detail until the eyes have recovered from exposure to this brilliant light source. This is simply a case of decreased visual acuity due to a brilliant light source in the field of vision. Misplaced side lights not only have a direct connection with the acuteness of vision, but this error also is one of the leading causes of various forms of eye diseases. In close application of the eyes, such as prolonged reading, that part of the retina known as the fovea-centralis is brought into use. This is focused by means of the eye muscles, which assist in forming an object and tend to keep the fovea on this object. As every one knows by experience, a brilliant light source tends to attract one's attention and when reading acts as a magnet for the fovea. In this way the muscles of the eyes are subject to conflicting impulses, the mental impulse of keeping the fovea fixed on the reading table and the unconscious impulse due to the attraction of the light source. A strain is set up in the eye muscles due to these conflicting impulses and prolonged reading will produce fatigue and headache, while continued use of the eyes under these conditions will naturally distort the complicated mechanism of the eye, leading to various forms of defective eyesight. This brief consideration of the eye and the function thereof should impress upon Architects the necessity of carefully planning any lighting installation, and especially the lighting of libraries where it is necessary to habitually use the eyes.

To return to the proper illumination of the reading tables, endless experiments have been made in trying to procure the proper shades and the proper height of standard for same. Every librarian has realized that in the past something essentially wrong was involved in the lighting of the reading tables, and no matter to what extent the experiments with brackets and cone shades have been carried in the endeavor to produce satisfactory results, the task has seemed hopeless. A moment's consideration of the fundamental laws of reflection will make plain to us the reason of this.

Any reading table where the surface is necessarily flat and persons compelled to sit facing the light source will reflect light at the same angle at which this light is thrown upon that surface. The light from a cone shade, on the ordinary desk standard, will be reflected directly into the eyes of the reader, producing a dazzling glare at the point of reflection on the table. It often happens in reading that this point is generally occupied by the reading book and the polished surface of the page only helps to increase the glare. In many cases this is true to such an extent that it becomes necessary to tilt the page in order to distinguish the type. The only way to relieve this condition is to have the light strike the working plane at an angle approaching 135 to 180 degrees, when it will be reflected to the chest of the reader and not into the eyes. The way in which this can be done practically is to use a principle of cross reflection, throwing the light on the reading page at such an angle that no light is reflected directly into the eyes. Scientifically designed fixtures are now available where by means of this principle reading has been made possible without annoyance or discomfort. A fixture approximately the length of the table placed in the centre thereof and the lights totally concealed from view by an opaque frame work of metal is now employed. These fixtures can be made as ornamental as desired, but simple designs have proven most satisfactory. The interior of these fixtures are equipped with reflecting glass with angles so arranged as to throw the light as described above. The height of standards and exact shape of reflectors depend on the dimensions of each individual desk and expert advices should be consulted with reference to this detail. This method was first worked out in reference to the illumination of double desks in banks where an endless amount of close observation and almost continual use of the eyes is necessary, but it is being adopted for library illumination in many of the newer buildings.

The lighting of newspaper racks and gangways also present typical problems. Paper racks can be perfectly lighted only by means of some fixtures involving uniform perpendicular distribution and the source of light must be placed far enough away from the newspapers to prevent glare on the reading pages. The lighting of gangways can be best accomplished with lights placed flush with the ceiling and equipped with a symmetrical reflecting device throwing the maximum flux to the bottom of the rack.

Appreciation of art is closely connected with the appreciation of books and for this reason we generally find an art gallery in every library. This always forms a difficult subject for artificial illumination. A subdued general illumination is necessary with strong local lights concentrating the lights on the picture space. It is necessary to place these lights exactly in the proper position to avoid glare at any part of the picture space and yet to have the source totally concealed from view. This problem has long been successfully overcome by the use of continuous reflectors mitred to run parallel with picture space, but there has always been the obvious objection that they tend to mar the beauty of the room. In the new New York Public Library, careful co-operation of the Architect and manufacturers succeeded in producing a reflector of this type of cold drawn bronze, which not only resulted in perfect illumination of the picture space but added materially to the beauty of the gallery. Modern knowledge as to the needs of library illumination, and scientific design of lighting specialties, such as used in the various classes of library illumination make the planning of new installations comparatively easy and luckily in library work, where local illumination is so much a factor, it is comparatively easy to remodel poor installations and equip a library with up-to-date lighting, without going to the expense of remodelling the entire building, as was the case when the scientific features of illumination were less well understood.

THE NEW YORK ARCHITECT

PUBLISHED MONTHLY BY

THE HARWELL-EVANS COMPANY

118 East Twenty-eighth Street, New York

AUBREY HARWELL, Prest. JOHN R. EVANS, Vice-Prest. and Treas.

M. L. HOTCHKISS, Secty.

JACK MAJOR, Advertising Manager

Subscription rates, Ten Dollars per year

Entered at the New York Post-Office as second-class matter

DONN BARBER, Editor

WILLIAM H. CROCKER, Associate Editor

CONTENTS

JOHN MERVEN CARRÈRE

By Thomas Hastings - - - - - 65

By Irvin K. Pond - - - - - 67

By Henry Rutgers Marshall - - - - - 69

By C. H. Aldrich - - - - - 70

By Donn Barber - - - - - 71

THE NEW YORK PUBLIC LIBRARY - - - - - 73

THE ILLUMINATION OF LIBRARIES - - - - - 83

EDITORIAL COMMENT - - - - - 89

BOOK STACKS OF THE NEW YORK PUBLIC

LIBRARY - - - - - 91

NOTES AND COMMENTS - - - - - 95

ILLUSTRATIONS IN PHOTOGRAVURE:

The New Public Library

THREATENED ENCROACHMENT ON CITY HALL PARK

IT was hoped that the question of further encroachment on City Hall Park, in this city, had been settled for all time. It is, therefore, with some surprise we note a bill has been hurried through the Legislature at Albany giving to the Justices of the Supreme Court of New York County sole power and authority to locate and plan a new County Courthouse. The conceded aim of this extraordinary legislation is to place this new building in City Hall Park.

When the question of a site for the proposed new courthouse was debated, about a year ago, the sentiment against its location in City Hall Park was so pronounced as to cause those who favored such a location to retire from their position. The architectural profession in this city was almost a unit in protesting against the location of any further buildings in this park. The late John M. Carrère exerted all his influence to avert what he declared would be most unwise action.

Those who urged a location in the park, on the score of economy or the inability of the city at that time to legally increase its debt, fail to realize now that, owing to the readjustment and increase of assessment values, the city is in a position to acquire a site by purchase, and thus prevent any further building on the already too limited area of our city parks.

The New York Chapter of the Institute, with customary energy, has lodged objection to this most pernicious legislation.

We cannot believe those responsible for it will fail to accurately measure the importance of a protest from a source so competent to judge the merits of the case.

Those who have the city's welfare at heart might even go further than to object to the erection of additional buildings in City Hall Park. This location should be rid of existing encroachments and cleared of every structure save the City Hall itself.

Then a building in which every resident of the city takes pride, and one of the best examples of Georgian architecture extant in America, would have a dignified and befitting setting.

THE LITERATURE OF A PROFESSION.

A WRITER in a recent issue of a current English architectural magazine dwells at some length on the great value to the architect in practice of a large and well selected library. Not only a single collection of books whose subjects are confined to the purely technical side of his profession, but a wider selection including such historical and biographical works as will enable him to acquire a truer knowledge of the things he attempts in his professional work. This writer believes that it is doubtful if the old architects understood the history of their art as it is understood now. If they had, many inconsistencies perceptible to the trained mind of to-day would not be present.

It is suggested that even Wren, could he have had access to books of early Greek work, would not have erred in details as he is known to have done. To know the history of architecture thoroughly, the history of the people and their religion must be mastered. To quote from Professor Baldwin Brown's essay on The Fine Arts—"Art only lives because the genius of changing ages or of in-

dividuals is forever vitalizing traditions and introducing new principles of growth. The secret of success in art is to blend the old and the new so as to obtain the full value of both indispensable elements."

And it is only by intimate knowledge, based on familiarity with the history of the people who have vitalized art that the architect can hope to successfully apply those principles and examples that have been handed down to us. Nor is this knowledge in itself all sufficient. We must be familiar with something more than the artistic side of the early nations of the earth. It is needed to know of their daily lives, their commerce and the various nations with which this commerce brought them into intimate relation, if we are to understand the principles for which their art stood, the source of their information, and the influences that controlled it and caused the steady rise to heights of greatest achievement or that decadence that foreshadowed its extinction.

To quote from the writer already referred to:—"History proves to us that no state, no philosophy, no art has ever been based on material interests alone. Nations that we know only as great commercial nations have left nothing behind them." The sordid spirit that dominates a commercial nation has always been inimical to good art, and it is to a nation like Greece that we must look

for that steady progress in all that is uplifting and worthy of emulation. Greece bore a message not only to their own time and country but to all men in all ages; their art was classical—that is, conforming to what is permanent and above criticism in human life.

It would therefore seem to be true that the process in the evolution of the truly artistic mind is one of self-culture. A culture that does not end with student days but an education that continues all through the professional life. It means intelligent and sustained toil, and that can only have good results when it is based on a mastery of the traditions of one's profession. To the architect, whose art is the oldest of all arts, it requires an amount of reading so wide in its range as to practically cover the history of the world. He must be familiar with the habits and customs of nations of the earth, and it will not be possible to know their architecture, and adapt its suggestion to his work until he has mastered this knowledge. And, when this knowledge is acquired we shall be able to distinguish the good from the bad, to hold fast to the truth and reject the false, which so often masquerades under the guise of the good.

It is then, and only then, that we shall be able to give expression to the good that is in us and rise to the higher and truer plane of our artistic life.

"To have faith is to create; to have hope is to call down blessing; to have love is to work miracles. Above all, let us see visions, visions of colour and light, of green fields and broad rivers, of palaces laid with fair colours, and gardens where a place is found for rosemary and rue."

THE BOOK STACKS OF THE NEW YORK PUBLIC LIBRARY.

Modern methods of fire prevention, heating, ventilating, sanitation and illumination have revolutionized the storage and handling of books in libraries. From the smallest home library, often the depository of a collector's rare editions and always of his more intimate and equally treasured volumes, to the great stacks where the modern public libraries store their books, the essentials of proper care are the same, the conditions only varying to meet the requirements of increased numbers.

The bibliophile has told us that many priceless volumes have been ruined by reason of their neglect, or conversely, by too much care, based on ignorance of the proper conditions that should surround books in storage.

Sanitation is as necessary to books as it is to the human being. Large numbers of people confined in poorly ventilated rooms

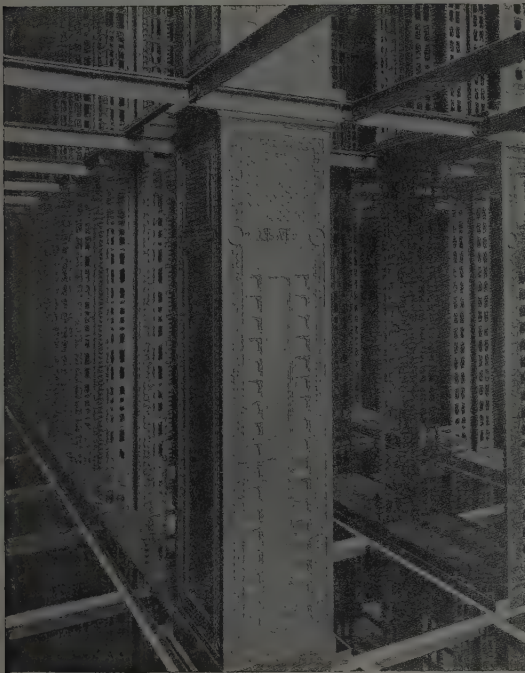


THE COMPLETED STACK, WITH FLOORS
AND CEILING

where they breathe vitiated air soon show the effects of these unhealthy conditions.

In just the same way do books deteriorate and present the signs of age. To accomplish the essential of a free circulation of air it is necessary to make the shelves and their supports as open as possible. Referring to the illustrations of the stacks in The New York Public Library on this page it will be noticed that the uprights are pierced by openings and all metal possible is cut away consistent with the necessary structural strength in order that fresh air and moderate light may reach the books.

The deck slits, which open along the face of each book stack range from the lowest to the highest, further increase this feature of a free and unimpeded circulation. It must be remembered that while the main stack room contains seven stories, it is really one large room, divided in its height only by galleries or mezzanine floors. The stacks with their open ironwork supports run in unbroken length from the floor at the lowest level up through the various mezzanines to the Reading Room floor, which they carry, and with the deck slits provided there is a minimum of obstruction to a free passage of air. In short, if all the floors were taken away, the stacks and their contents would still remain intact.



INTERMEDIATE TIER OF STACK, NEW
YORK PUBLIC LIBRARY

SHOWING VENTILATING DUCT ENCLOSED WITH
CAST IRON PLATES

THE NEW YORK ARCHITECT

It is a novel construction, valuable as an example of what may be accomplished when undertaken with knowledge and ability.

The lighting, either natural or artificial, in a stack room as large as that of the New York Public Library involved problems that would have been difficult of solution two decades ago. Modern illumination methods have enabled the architects and the constructors of this stack to present a solution that meets every present-day requirement.

When it is considered that this stack is 297 feet long, 78 feet wide and almost 60 feet high, and that it is filled with closely packed books and broken by many gallery levels, we may be able to understand the conditions which exist.

The electric lights are controlled from switches placed in convenient positions along the central aisle. The white marble floor slabs with polished under surfaces act as excellent reflectors.

As to day-lighting: the long narrow windows on the westerly side of the stack room are glazed with prisms which reflect the light horizontally into the room. To further increase the value of the light all standards and fixtures are painted a flat white, which, with the white marble floors and ceilings, insure diffusion and prevent glare.

In a large circulating library it is essential that every book shall be perfectly sanitary. We do not know the conditions surrounding books that are loaned or even those attendant on constantly handled reference volumes, hence it is necessary that both light and fresh air be provided to act as germicides and guard against the spread of disease.

While it is unnecessary to state that the stack of the New York Public Library is thoroughly fireproof, it may be well, in passing, to say a few words as to how this is accomplished.

The walls are of solid masonry and marble slabs are used for the floors and ceilings of the galleries or mezzanine floors. As previously stated, the supports or uprights are of metal, as are also all shelves. There is, therefore, in the entire construction no wood or any material that will burn.

As to the books, it is well known that they

will not burn by themselves without the addition of other fuel. The method of their storage, in closely packed air tight rooms, gives flame no chance to reach them. All communicating doors are metal and fire-resisting, and the electric wiring, which has received the most careful attention from the architect, is the very best that modern practice can devise and afford no fire hazard.

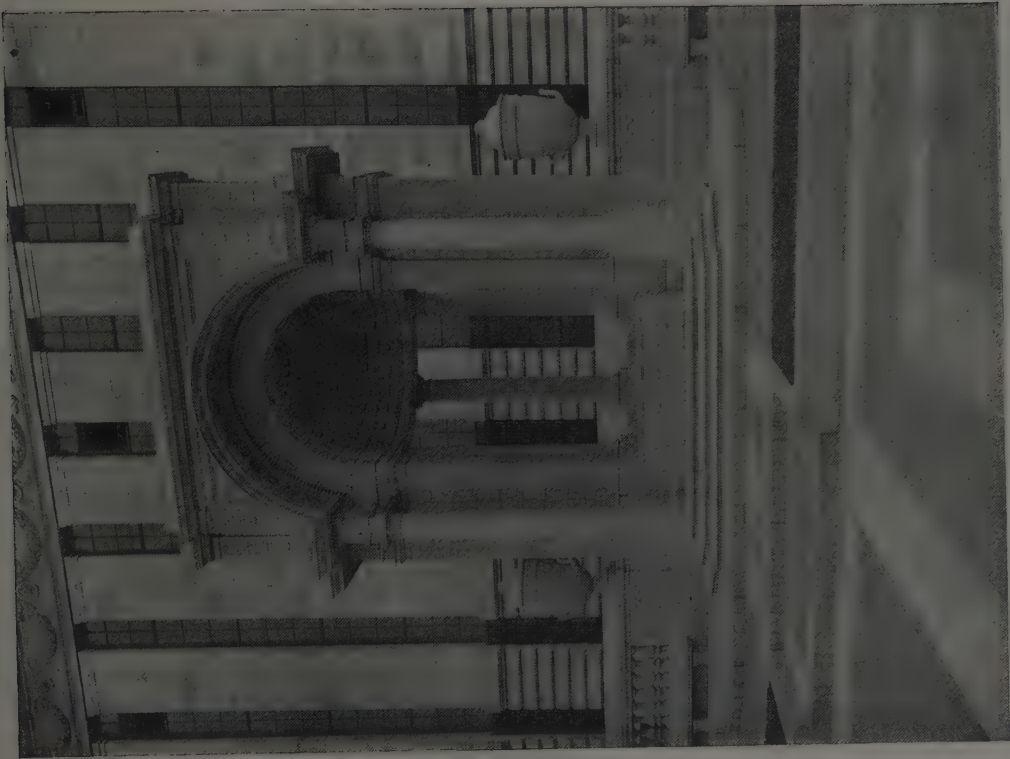
The accessibility and general convenience secured in the planning and locating of the main stack is an important feature in this very important building. Messrs. Carrère & Hastings, the architects, with the coöperation of the builders, have secured a result which makes this aptly called "largest book-case in the world," the most perfectly appointed in existence.

Directly above the main stack is the Reading Room. The books are elevated from the stack to the delivery desk and every book in the stack is within a radius of fifty-three feet from the reading room. It will be seen that the features of accessibility, convenience and promptness of delivery are unsurpassed.

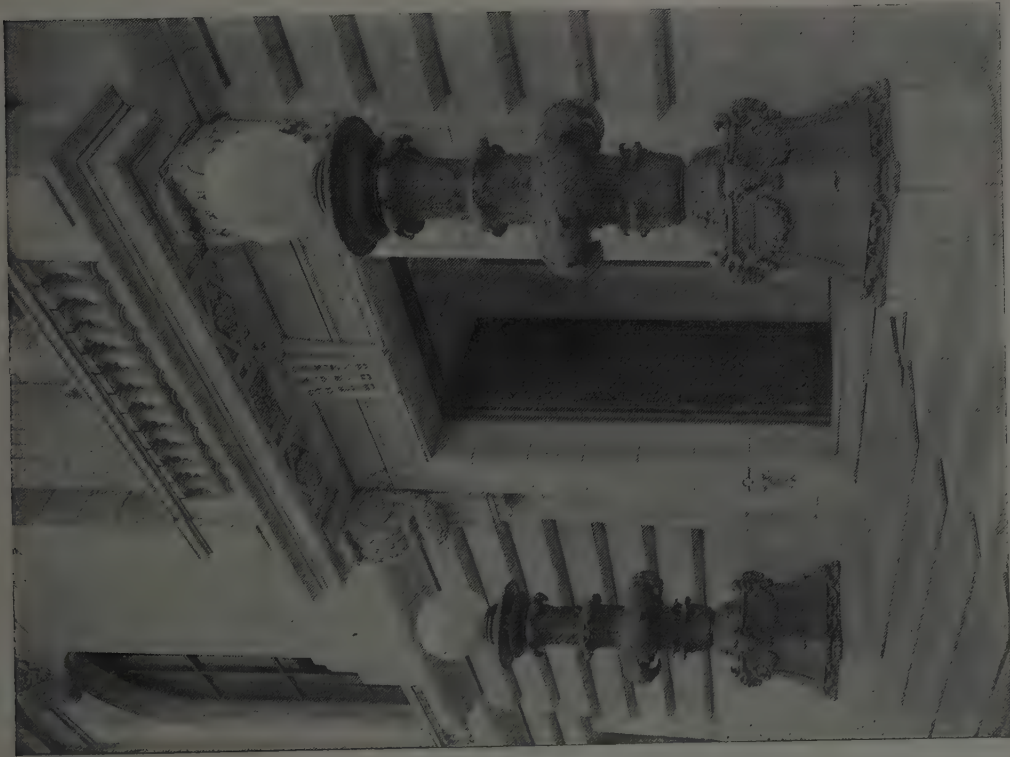
A further feature conducive to accessibility in handling the books in the stack is the low ceilings of the various galleries. These permit a man or woman of ordinary height to reach books on the topmost shelves.

That the architects have worked the storage of the books into the architectural and decorative treatment of the building is so very apparent as to need but passing notice, but the fact of its accomplishment in so successful a way shows with what good judgment this and other very difficult problems have been met and overcome.

This stack was built by The Snead & Co. Iron Works of Jersey City, N. J. Their large experience in similar construction, including the entire equipment of the Library of Congress and their very careful study of the requirements of modern book storage has enabled them to produce a result that is probably the most successful of any similar undertaking. To appreciate the magnitude of this work let us state that there are, in the Main Stack Room and forty-three special Library Rooms, seventy-five miles of shelving, with a capacity of 4,000,000 volumes.



BRYANT MEMORIAL



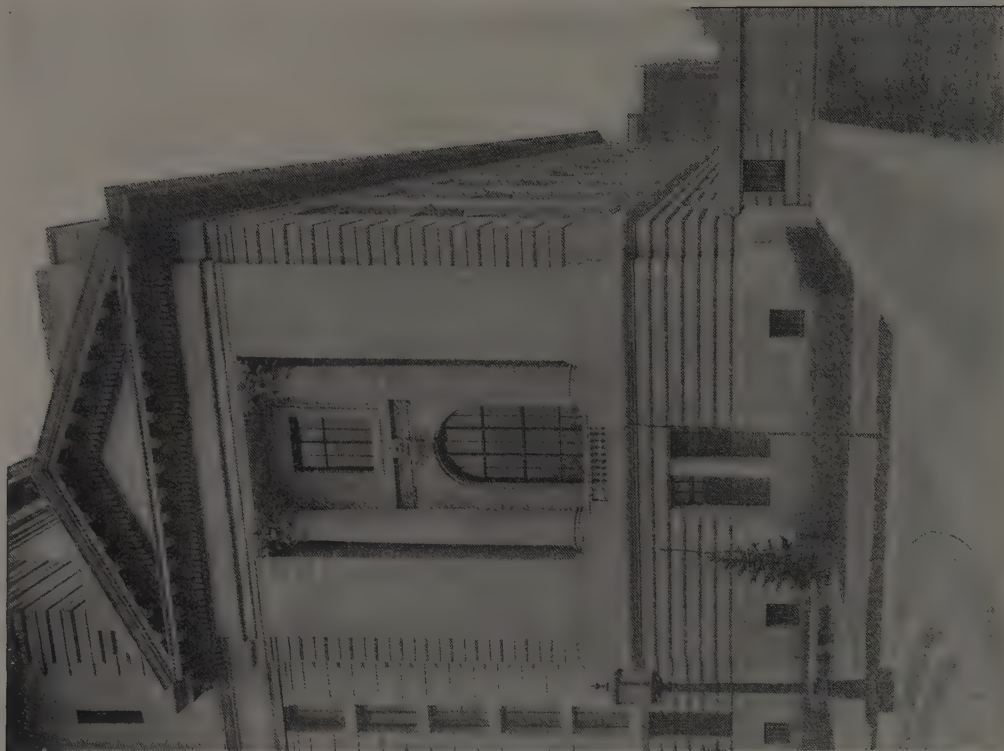
ENTRANCE ON 42D STREET SIDE

NEW YORK PUBLIC LIBRARY
CARRERE & HASTINGS, ARCHITECTS



LOOKING ALONG NORTH SIDE

NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS



LOOKING ALONG SOUTH SIDE

NEWS NOTES AND COMMENT

THE CONGRESS OF TECHNOLOGY IN BOSTON APRIL 10-11

The Congress of Technology, which met in Boston on April 10 and 11 in celebration of the semi-centennial of the signing of the charter of the Massachusetts Institute of Technology, was a pronounced success on the two main lines laid out by its projectors. The Congress opened on the afternoon of April 10 with an address by President MacLaurin of the Institute.

The second day of the Congress was given over to the presentation of papers on various aspects of applied science. These papers were grouped in six divisions, so arranged that the large numbers of the outside public which attended all the sessions were able to hear papers on the topics in which they were especially interested.

The papers presented at the public session gave to the audiences an adequate idea of how completely applied science shapes and controls the living conditions of the present. And as all the papers were by alumni or members of the faculty of the Institute it was also made clear how large a part the Institute had played in creating the applied science to-day.

These two ideas were expressed along with the third idea more immediately practical at the great banquet. It has been clear for some time that the future development of the Institute of Technology is hampered by the lack of adequate endowments and buildings. The feeling that the beginning of the next half century of the Institute ought soon to see a New Technology, carrying on the standards of the past with greater facilities, was the dominant note in all the speeches at the banquet.

The separation of the engineer from the architect was the topic of Luzerne S. Cowles, '97, of Boston, who noted how in European countries the harmonious and artistic development of civic centers during modern times has proved an enormous benefit to them. In ancient times the architect acted as his own engineer; there was little haste in completing a project; and artistic treatment requiring much time and labor

was made possible. The ultimate aim of securing the best results was then possible, because time and labor were less important than they are to-day. In the United States there has been, until recently, the tendency to keep the engineer and the architect apart, and the result has been very much in the way of inartistic utilitarian building. Municipalities have been grave offenders in this respect. Consequent on the increase in wealth and population of the cities of the United States, there is at the present time from public and press alike the demand for rational and civic improvement along harmonious lines. The engineer, inartistic as he may be, comes now to the aid of the architect, who will submit to him questions where engineering judgment is desired, while, on the other hand, the engineer must acknowledge that the architect has the advantage of improving the appearance of constructions, especially of metal. This coöperation was the dominant note of the latter portion of Mr. Cowles's paper, who showed that while private individuals assumed the right to erect almost any kind of building they wished, the public service corporations are realizing the importance of erecting structures good not only from the engineering, but the architectural standpoint. "The training of architects in close proximity to engineers should be encouraged," said Mr. Cowles; "the architect's work embraces the designing of buildings whose form depends on engineering theory and experience. This proximity need not affect the architect's artistic tendencies, but it cannot help training his mind to better work."

CITY PLANNING

Mr. George B. Ford, in a lecture recently delivered at Columbia University on City Planning, said, that while America is counted the most practical nation in the world, it has been most unpractical and unbusinesslike in the building of its cities.

"America," said he, "is the only country that has devoted its attention in planning its centres of population almost exclusively to the æsthetic side. In America the cry has been 'The City Beautiful.' Abroad it has

been 'The City Logical, Convenient, Healthful, Businesslike, and then Æsthetic.'

"Of the seventy or eighty cities and towns in America that have considered city planning, only two have treated the subject in a comprehensive, practical way. One of the two is perhaps America's most businesslike city, the other is her most artistic. Pittsburgh and Boston alone have kept prominently before them in planning for their future that a city is essentially a place to live and work in. Thus, attention has been given primarily to housing, transit and transportation by land and by water, and to the location of factories. Recreational features, such as playgrounds, neighborhood centers, and the location of baths, gymnasias, libraries, etc., have been considered in relation to housing. The proper distribution of parks and boulevards and city embellishments has been taken up with strict reference to the foregoing features.

"It is only by proceeding on a programme of this sort that a city can fulfill its duty toward the next generation and when we couple with this the fact that it pays not only in health, working efficiency, and enjoyment of life, but pays actually in dollars and cents—a fact which is attested by every city here or abroad which has planned its improvements at all comprehensively—is there any valid excuse whatsoever for any town or city neglecting to consider city planning?"

FIRE PROTECTION AND PREVENTION

It is gratifying to know that the lesson taught by the recent disastrous fire in New York is being availed of by other cities, whose officials have been awakened to the necessity for thorough and competent measures to prevent a similar occurrence.

At a recent meeting of the Boston Architectural Club, the subject of proper fire protection and prevention was very thoroughly discussed. This discussion was given importance and authority by the participation of Fire Commissioner Daly, Fire Chief Mullen, F. Elliot Cabot, Secretary of the Boston Board of Fire Underwriters, and Mr. Charles Logue, Chairman of the Schoolhouse Department. Among the suggestions offered, the most important were the

installation of a high pressure service, the entire abolition of shingle roofs and the building of fire stops at strategic points entirely across the city.

While the latter suggestion is not a new one, it is none the less a most important thing in the prevention of conflagrations.

The idea involved in the suggestion was the erection of buildings constructed entirely with a view of withstanding fire and checking its spread.

Further referring to the lessons taught by the Asch building fire, the Brooklyn Chapter of the Institute has rendered a great service by the publication of the report of the joint committee on Surveys and Legislation of the Chapter on this fire. The committee, which is composed of Messrs. Carrel, Harder, Koch, Bryson and Melproth, visited the ruins and made a thorough inspection. Their report is perhaps the most important technical *résumé* of conditions both before and after the fire, that has yet been published, and their recommendations, the judgment of men eminently practical, will, we hope, receive the careful consideration to which they are entitled.

ASYMMETRIES IN THE PISA CATHEDRAL

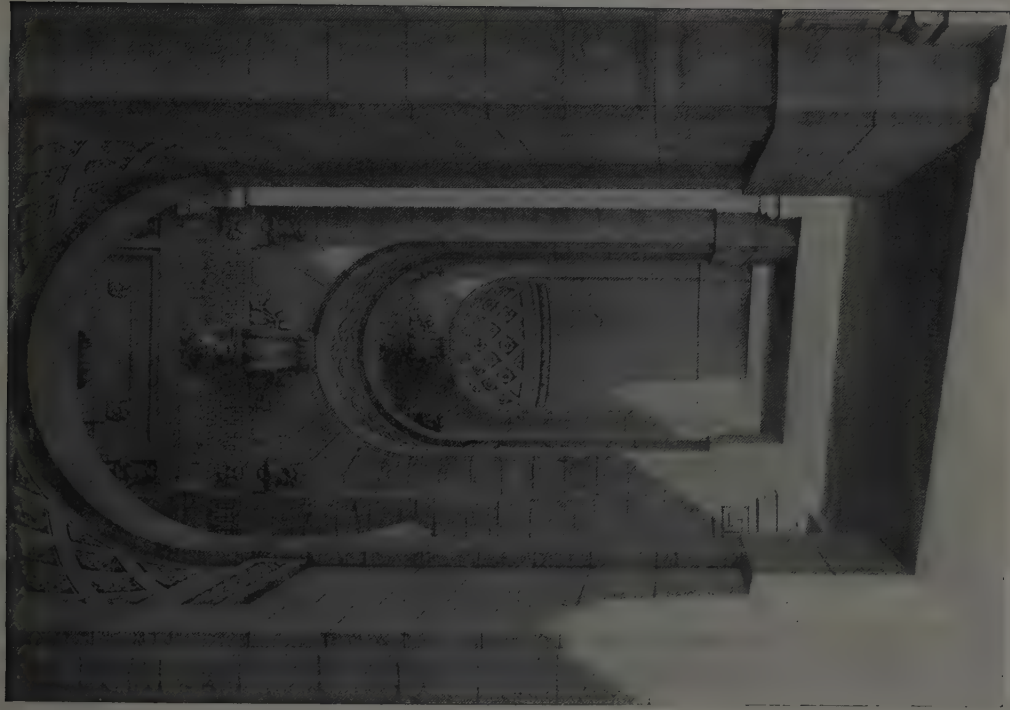
In the April 21 issue of the Bulletin of the Brooklyn Museum of Arts and Sciences, Professor William H. Goodyear has contributed a most important article on the systematic asymmetries of measurements in the Pisa Cathedral.

In some of its various features the Pisa Cathedral is an exceptional, but by no means a wholly isolated, mediæval construction.

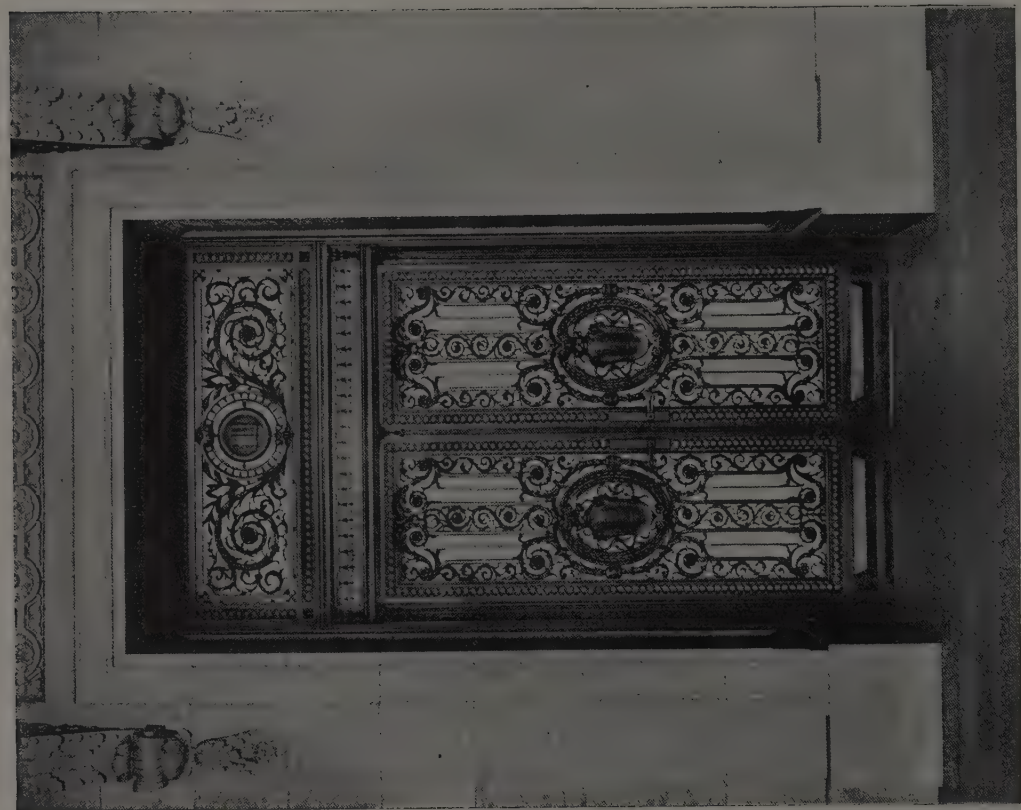
An opportunity is afforded the architect to become more familiar with these features of asymmetric construction, and the vast possibilities of their adaptation in even the smaller structures, by reason of the series which Professor Goodyear is contributing to the Museum Bulletin. Copies of these Bulletins may be obtained by addressing Professor Goodyear at the Museum.

THE HERITAGE OF TRADITION

This age is the antiquity of future ages, and has a precious heritage in the works of past ages, and yet irresponsible persons are allowed to destroy the beauty of our villages, the interest of our towns, and mar our city streets at every turn.



NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS



NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS

It is the duty of this generation to see that architectural tradition does not suffer at its hands, or through its negligence, and that the tradition should be carried on and handed over in some degree the better for the care it has received.

The registration of architects, by binding the members of the profession together, by enforcing a statutory disqualification, by emphasizing the necessity for the study of architecture as an art, and through the power it would have as a united and definite profession, able to speak with one voice, could only have the effect of furthering this ideal of carrying our tradition forward, and proving to future critics that this generation was solicitous for the well-being of that art, which is undoubtedly the truest index to the culture or civilization of any age.—*The Builder*, London.

THE MEANING OF TOWN PLANNING

As is the case with all conventional phrases, "town planning" has different meanings in different mouths. To the medical officer of health it means sanitation and healthy houses; to the engineer, trams and bridges and straight roads, with houses drilled to toe a line like soldiers. To some it means open spaces; to the policeman regulation of traffic; to others a garden plot to every house, and so on. To the architect it means *all* these things, collected, considered, and welded into a beautiful whole. It is his work, the work of the trained *planner*, to satisfy all the requirements of a town plan, and to create in doing so a work of art. That this is not an unprofitable matter even from the merest business point of view is self-evident. Nothing is more ruinously wasteful than unregulated growth, whether in nature or a city. It will certainly have to be pruned away, thinned out, or dealt with in such-like drastic fashion if it is not trained and supervised during its formation; and to cut away slums and open up light and air to them by avenues and open spaces is a very costly and not always satisfactory process, which may be avoided by intelligent anticipation.

Another point—perhaps the most important of all—is the tremendous influence upon man, the animal, of the surroundings in which he is bred and passes his life. Rus-

kin, speaking of the blocks of London houses intersected by railways, said, "It is not possible to have any right morality, happiness, or art, in any country where the cities are thus built, or thus, let me rather say, clotted and coagulated; spots of a dreadful mildew, spreading by patches and blotches over the country they consume. You must have lovely cities, crystallized, not coagulated into form; limited in size, and not casting out the scum and scurf of them into an encircling eruption of shame, but girded each with its sacred pomœrium and with garlands of gardens full of blossoming trees and softly guided streams." The animal man can never be morally sound if he is deprived of those reasonable and healthy pleasures to which he is entitled; and Art aims at giving pleasure in a noble form. "*Non tantum corpori*," said Seneca, "*sed etiam moribus salubrem locum eligere debemus*."—JOHN W. SIMPSON, in the *Transactions of the Town-Planning Conference*, London.

DIGNIFIED ADVERTISING METHODS.

Kenyon Cox, N. A., whose reputation as an artist is nation wide, and whose work as a mural painter is familiar to the members of the architectural profession, recently gave an interview to a representative of one of the leading New York daily papers. In the course of this interview, which dealt with various phases of art in America and its influence on the daily life of the people, Mr. Cox expressed views on the proper presentation of advertising matter that were in a sense an unqualified endorsement of the policy inaugurated by THE NEW YORK ARCHITECT on its inception more than five years ago and successfully maintained ever since.

Mr. Cox was asked the question: "Would an inartistic, vulgarly worded advertisement of a standard article sell as many goods as one that was presented in a dignified and exclusive way, even to people who are not credited with artistic tastes?" To which he replied: "I am no salesman, but I can say this—a certain kind of vulgar 'ad' was to me so thoroughly repellent, that for a long time it deterred me from buying products which when I did try them I found to be most excellent."

This statement by so eminent a man and

one who is so keenly alive to the artistic value of things, tends to prove the contention that to endeavor to attract attention to an article that is bought and used by people of refinement, or to try to influence its selection by men of artistic training by poorly worded and inartistically prepared advertising matter, is not alone a waste of money but tends to discredit the article it is desired to exploit. In the same way that we often form an opinion of the personality of a man we have never seen by the stationery he uses or the business card he sends to our desk, does the reader of an advertisement judge the character of the article advertised, by the general impression gained from the text and arrangement of the printed page. While in Shakespeare's day good wine needed no "bush" modern business methods and the keen competition always present makes it necessary for the merchant, if he would win success, to keep his name and his wares constantly before the buying public, lest he be forgotten.

Those who show indifference to the general makeup of their advertising are apt to be equally indifferent as to the quality of their goods. Advertising that is as expensive in its preparation and so high in price as that which finds space in this magazine, proves by its very selection the very high standard set by the advertisers. It was the idea of dignifying by the most artistic presentation possible every advertisement appearing in *THE NEW YORK ARCHITECT* that was present when the magazine was placed before the architectural profession. That the policy was correct and sound is proven by the very high class of advertisers who have sought its pages.

The worth of magazine advertising has become so generally recognized and the necessity for its careful preparation so fully understood, that the great buying public in this country are to-day largely dependent on the pages of the magazines for information as to the merits of things to be had.

It is therefore, we believe, of the first importance that any magazine desiring to secure every possible advantage and a maximum of result to its advertisers, should give the same thoughtful and artistic consideration to its advertising pages, as it must needs give to its text pages and illustrations. This

we believe is accomplished by *THE NEW YORK ARCHITECT* in a more successful manner than any other technical publication issued in this country and perhaps anywhere abroad.

MODERN FURNITURE BUILDING

While architects have endeavored to educate clients to a true appreciation of good architecture, and have in a large measure succeeded, they have increased their own responsibilities. The laymen has been taught essentials and it has in consequence become necessary for the architect to give painstaking care to every detail. Fortunately, the craftsman, whose work so very materially contributes to the general result, early realized the value of his efforts in creating articles of utility and in carrying to a successful completion the suggested motives supplied by the architect.

If by renaissance we mean to indicate a new birth, then it may be safely stated that the art of the furniture maker is to-day in its renaissance. The enduring influence of the work of the Adam Brothers, Chippendale, Hepplewhite and other famous designers marked epochs in furniture construction. It might with good reason be supposed that with examples of such rare accomplishment, the result would be the improvement in style of even the least expensive grades of hand-made furniture. But with the march of modern invention and the introduction of machinery there set in a period of decadence that has lasted for more than fifty years, and we must look to the men who are building the better grades of furniture to-day for that renaissance of good design and excellence of construction that is now taking place.

The essentials of furniture are honesty of manufacture and correctness of design. What these mean in their application can be studied in an examination of the furniture that has been made for the New York Public Library. The architects, in order to conserve all the artistic results achieved in their own work, made sure that the furniture should be a satisfactory accessory.

It is an old and true saying that "every man should stick to his trade," and while architects can, and often do, design excellent pieces of furniture, it is safe to state that they will not do so quite as successfully as



NEW YORK PUBLIC LIBRARY
CARRÈRE & HASTINGS, ARCHITECTS

men who have spent years of study in designing and building furniture.

Given the dimensions of the room and the details of its architectural treatment, the modern maker of high class furniture may be safely left to produce a result that will be consistent and satisfactory in every detail.

Intelligent coöperation along these lines, between the architect and furniture builder, is responsible for the satisfactory result achieved in the furniture of the Public Library in this city. All the essentials are present—the highest class of skilled workmanship, honest materials, good form and true proportion, combined with ornament consistent with the rooms in which the various pieces have been placed.

And, like every well executed work in furniture, the result is "felt" more than it is seen. It is generally the poorly studied and consequently inharmonious effect that attracts the eye; that most unfortunate condition when every individual piece of furniture "fights" its neighbor, and makes the room a place to be avoided.

The builders of the furniture in use in the more important rooms of the Public Library have had long experience in similar large undertakings. A recent building of much importance, the Senate Office building at Washington, was furnished in an equally satisfactory manner, while many large hotels and private residences of importance have been furnished with modern furniture, specially made to meet the designs of the architects of the various buildings.

The makers of this furniture are S. Karpen & Brothers, whose offices and factories are located in New York, Boston and Chicago.

MILLS WATER-TUBE BOILERS

A large open combustion chamber with a *direct* fire surface would seem to be an ideal construction for a modern and efficient type of boiler. These features, combined with vertical water ways of small area into which the water is divided, quickly absorbs the heat and thus rapidly circulates the water in the tubes. The result is dry steam, the greatest possible heat absorption and an economical coal consumption.

It is along these lines that the Mills water-tube boilers, built by the H. B. Smith

Co. of 39 East Houston Street, New York, are constructed.

In the changeable climate of this country, with the wide ranges of temperature even within the space of twenty-four hours, a thoroughly dependable boiler is a first essential. It becomes necessary to construct a heating system so flexible in its character that it will answer to the most unusual conditions of extreme cold weather and that time when it is too warm for fires and too cold to be without them. In order to meet these conditions with certainty, to maintain efficiency, to heat with economy, and to secure all these at a minimum of first cost for installation, is the effort of makers of heating apparatus.

Another feature, and one not always considered, is that the care of the boilers is generally turned over to people with the least knowledge of requirements already stated; another, and that is to so construct the boilers that they will be "fool proof," and withstand the hard usage of irresponsible people who have the heating in charge.

The Mills water-tube boilers are claimed by the makers to combine these necessary features, to withstand greater pressure than ordinary types, and therefore give longer service. The material entering into their construction is the best that long experience can suggest, and the makers therefore believe that they will prove in the end the most economical form of boilers that can be installed.

A further feature of these boilers and one worthy of comment, is that they are constructed in a series of sections or units, varying in number with the size of the boilers. Each section is a complete water-tube boiler in itself, has free and rapid internal circulation, and has no dead spaces. They always maintain a steady and reliable water line. If for any reason it is so desired, one or more of these sections can be "cut out" of use.

WATERTIGHT ROOFS AND CELLARS

If a chain is no stronger than its weakest link then it may be safely stated that a house as a place of habitation is no better than the roof that covers it. When we want to describe a man as homeless we say of him that he "has no roof over his head," but there are

any number of people who pride themselves on the buildings they live and work in and who are but little better off, if we are to judge the character of the roof as a measure of the value of the building. Modern waterproofing methods, in the construction of roofs and the other extreme of the building, the cellar, have arrived at a high degree of efficiency. This satisfactory condition is not the result altogether of the perfected materials used, as it is the knowledge of how to handle them so as to secure the best results. All things being equal, experience and the skill that comes from long years of practice produces the best results.

The T. New Construction Co. of 518-520 West 29th Street, New York, have been, for almost fifty years, builders of roofs and cellars which have stood the test of years of actual wear until their work to-day has become known as the highest example of modern efficiency in this direction. They state with pardonable pride that in an important building constructed by the Government in Washington, and standing on a site where the waters of the Potomac River back up the foundation, the waterproofing in the cellar, done by them, is keeping out twelve feet of water that stands against the outer walls of the building.

It is claimed by this company that their brick and tile paved roofs will last a lifetime and the fact that many roofs of their construction have stood the wear of thirty-five to forty years' exposure and are as watertight today as when first placed, would seem to prove their contention. The very many important buildings throughout this country on which they have worked bear evidence of the confidence imposed in them.

HOT AIR REGISTERS AND GRILLES FOR INDIRECT HEATING

When the ingenuity of man made it possible to locate the stove or heater a considerable distance from the point where the heated air was delivered, it became necessary to provide some means for screening outlet openings. It was then that the hot air register with its regulating damper came into existence. When these outlets were placed in the walls their strength was not of much importance, but when set in the floor, often in the lane of travel, it became necessary to

make them strong enough to stand the wear and weight to which they were subjected.

It is only of recent years in this country that it has been thought desirable to give some measure of artistic expression to articles of every-day utility. During that period of artistic advancement in Europe, styled the Renaissance, no object was too insignificant to merit some embellishment. The bellows on the hearth, the fire-dogs or andirons, even the poker and ash shovel were adorned with much artistic work.

It is a healthy sign of our artistic growth that articles of similar utility are becoming to-day something more than commonplace.

All the accessories that go into the modern building are now carefully designed, or else the makers will find themselves outstripped by other more thoughtful competitors who know the merit of goods honestly made and artistically designed.

This feature of good design is shown perhaps in modern iron work and reveals itself in the register and grille, the ventilator and the screen. No firm could weather the stress of fifty years of business as conducted in this country and stand at the head of their line unless they appreciated these facts.

The Tuttle & Bailey Mfg. Co. of 76 Madison Avenue, New York, commenced business in 1846. Since that time they have been engaged in the manufacture of registers, grilles, ventilators and screens, and so well has their products met the requirements of the architect and the builder as to make it a standard in specification.

The large number of patterns and sizes that are always available is a great advantage to the architect in conserving the artistic unities of his interiors and that strict adherence to period styles now considered so essential. A point in the work as executed by the Tuttle & Bailey Mfg. Co., and one that will particularly commend itself to the architect, is that while prepared to supply designs from their large number of patterns, they are equally prepared to execute in the highest degree of excellence the original designs furnished by the architect.

A catalogue prepared by The Tuttle & Bailey Mfg. Co. illustrates the line of goods made by them. It shows the wide choice in selection of sizes and patterns and will be mailed to architects on request.

CANVAS AND ITS USES

To most men a bolt of canvas does not mean much. Like the "primrose by the river's brim, a bolt of canvas 'tis to him," and it is nothing more. But in the eyes of men who have been engaged for very many years in availing of the possibilities that are latent in canvas, it means its adaptation to a variety of uses that are almost innumerable. Canvas is daily becoming more generally used for the roofs of piazzas and portions of country houses and other buildings. A heavy canvas, properly prepared to keep out moisture and of such a nature as to be easily painted, gives a roofing which for service can be strongly recommended.

Again, to the architect, especially the man engaged in designing the country house, the awning is a very important feature. After he has, with much study, set his house in the center of a beautiful lawn or embowered it in trees, carefully thought out the color scheme and has secured a result that is artistic, the whole effect is spoiled unless the awnings selected are of appropriate color and design.

It is at this point that experience of many years can be advantageously used by the architect or builder in the selection of the awning materials. The knowledge of the comparative durability of different colors, their appropriateness depending upon the color scheme, and the selection of the cloth itself—all these points should be given full consideration.

From a house which during its existence of over Half a Century has grown from a small loft, where awnings were put together by hand, to the supply of probably 75 per cent. of all the awning materials used in America, the architect can assuredly obtain information which will enable him to give his client what that client expects. The Advisory Department of the old established house of John Boyle & Co., Inc., 112 Duane Street, New York, is in position to demonstrate the superiority of their Guaranteed Awning Cloth in the qualities necessary to satisfactory service and to aid in the selection from their very large variety so as to secure pleasing color effect. Their Bayonne Roof and Deck Cloth is easily laid, possesses

unusual wearing quality and can be furnished to harmonize with other parts of the house by application of one coat of paint only.

THE REGULATION OF TEMPERATURE

While the regulation of the temperature of the buildings in which we live, and the control of the humidity of the air we breathe has for more than half a century been realized as one of the most important hygienic conditions of our daily lives, it is but twenty-five years since the control of temperature and humidity has been a practical accomplishment.

As far back as 1884 the Johnson System of Temperature Regulation was first introduced, and since that time, successive improvements based on the necessities of modern building methods, have resulted in a system that it is claimed satisfactorily meets every demand of the most perfect service.

Temperature regulation by The Johnson Service, is obtained by means of a thermostat, placed on the wall of the room to be heated. The thermostats made by the Johnson Service Co. are applicable to every form of heating that it is possible to devise, and it is claimed they will operate with equal efficiency whatever the method of heating or whatever the size of the valves or dampers to be operated.

The introduction of this system into The New York Public Library would seem to present sufficient evidence of its absolute reliability if such evidence was needed, but the fact that this system has already been installed in many equally important structures where it has withstood every test, no doubt supplies the reason for its use in the library.

The head offices and factories of The Johnson Service Co. are at Milwaukee, Wis. They have branch offices in all the principal cities in the United States, Canada and Europe.

The illustration of the early work of Carrère & Hastings in St. Augustine, Florida, shown in this issue, is reproduced by permission of "The American Architect," the owners of the copyright.